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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,699	05/30/2006	Mark L. Posey	81,635	2989
29089      7590      03/18/2010 HUNTSMAN PETROCHEMICAL LLC 10003 WOODLOCH FOREST DRIVE THE WOODLANDS, TX 77380				
EXAMINER				
SERGENT, RABON A				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
03/18/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/563,699

**Applicant(s)**

POSEY ET AL.

**Examiner**

Rabon Sergeant

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date 7/20/2009
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

1. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The formula set forth within claim 1 allows for the compounds to be monofunctional; therefore, it is unclear how the reaction of such compounds can yield a polyurea having the claimed property.
2. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, applicants have claimed that the compounds defined by the claimed formulas are polyether polyamino compounds; however, embodiments are set forth wherein the formula contains a single amino group. Note structure when X is i). In such instances, a polyamino compound is not set forth.

Secondly, the claimed formula allows for the compounds to be monofunctional; therefore, it is unclear how the reaction of such compounds can yield a polyurea having the claimed property.

Thirdly, when X is iii), it is unclear how the formula can recite a viable compound when variable "a" is 7.

Fourthly, with respect to the definition of  $R_2$  within claims 1 and 11, it is unclear how to interpret the use of the word, "each", since only a single variable is set forth.

Fifthly, given the limited molecular weight of the compounds recited by the claimed formula, it is unclear how these compounds are distinguished from the chain extenders of claims 3, 6, and 14.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 4-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 7,078,475. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to the production of a polyurea from the reaction of polyisocyanate and polyamines, wherein the polyamines of the patent encompass the secondary amines of the instant claims.

5. Claims 1 and 4-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9, 13, 14, and 16-20 of copending Application No. 11/365,726. Although the conflicting claims are not identical, they are not patentably distinct from each other because each set of claims is drawn to the production of a polyurea from the reaction of polyisocyanate and polyamines, wherein the polyamines of the copending application are met by secondary amine formula of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. The examiner has reviewed provisional application 60/485,129, from which applicants claim priority; however, the disclosure within 60/485,129 is insufficient to support the full scope of the claimed subject matter under the provisions of 35 USC 112, first paragraph. Accordingly, applicants cannot rely upon the filing date of the provisional application.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 4-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Klein et al. (US 2006/0160980 A1)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Klein et al. disclose the production of polyureas by reacting polyisocyanate with polyoxyalkylene polyamines, wherein the structural formulas of the polyoxyalkylene polyamines allow for the presence of secondary amine groups. The claimed physical property is considered to be an inherent property, given that the respective reactants read on each other.

9. Claims 1, 2, and 4-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Hinz et al. ('852) or Becker et al. ('487) or WO 02/102869 A1.

Each of the references discloses the reaction of polyisocyanates with secondary amine group containing polyoxyalkylene polyamines that have structures that correspond to those

instantly claimed. The references further disclose the use of chain extenders in the production of the polyureas. Lastly, with respect to claim 2, the references disclose index ratios such that an excess of isocyanate reactive groups will be present relative to the isocyanate functional groups. See column 6, lines 50+; column 7; and column 10, lines 22-33 within Hinz et al. See column 9, lines 58+; column 10; and column 14, lines 3-12 within Becker et al. See abstract and pages 5-9 and 14 within WO 02/102869. The formulas set forth within these pages WO 02/102869 clearly encompass secondary amine groups.

10. Despite applicants' response, it appears from the polyamine structures encompassed by the claims that the claims continue to encompass secondary polyamine compounds that are disclosed by the references. Clarification is required as to how the claim amendments definitively exclude the polyamines of the references. Furthermore, given that the instant claims and disclosures of the references are considered to encompass the same reactants, the position is taken that the instantly property is inherently possessed by the polyureas of the references.

11. Claims 1, 3, 5-8, 11, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 408211 A1.

The prior art discloses the reaction of alkyl diisocyanates with secondary polyamines that meet those claimed at molar ratios of 1:1. See abstract and pages 3-5, especially page 5, line 55. The position is taken that at this molar ratio polyurea polymers result that are reasonably expected to possess applicants' claimed physical property, because the reactants of the reference and the instant claims read on each other.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

Art Unit: 1796

/Rabon Sergeant/

Primary Examiner, Art Unit 1796